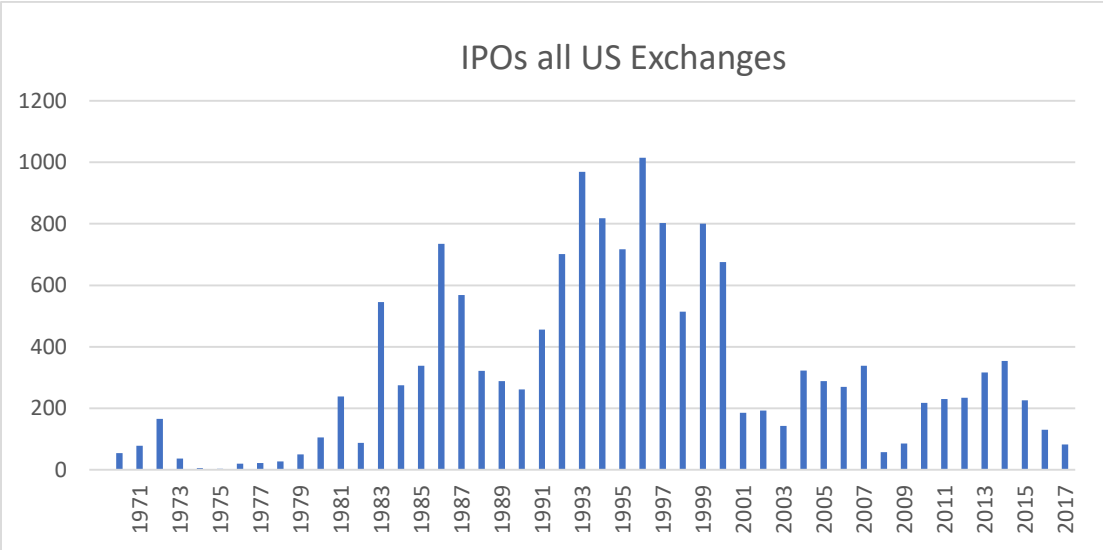
Jim Brau Answers to June 22, 2017 SEC IAC Questions

- What are the trends regarding the number of IPOs? Has there been a sustained decrease in the number of U.S. IPOs? What does the data show?
    - Virtually uniform agreement there has been a sustained decrease – see chart below.



Through June 13, 2017. Total IPOs 15,384. Includes all US exchanges on SDC New Issues Database. Figure by Jim Brau.

- What do academic studies tell us about the trends and their causes?
    - My own research
        - "The Choice of IPO Versus Takeover: Empirical Evidence," J. Brau, Bill Francis and Ninon Kohers (Sutton), *Journal of Business*, Vol. 76, No. 4, 2003, pp. 583-612.
            - View harvest choice – M&A vs. IPO: 1996 M&A became more popular than IPO as harvest. There is a discount for taking more liquidity (cash merger)
        - "Initial Public Offerings: An Analysis of Theory and Practice," J. Brau and Stan Fawcett, *Journal of Finance*, Vol. 61 (February), 2006, pp. 399-436.
            - Ask CFOs why IPO
                - Create public shares for acquisitions
                - Establish market value
                - Enhance reputation of firm
                - Minimize cost of capital
            - Ask about timing of IPO
                - Overall stock market conditions
                - Industry conditions
                - Will need capital to grow
                - Other good firms IPOing
                - First-day stock performance recent IPOs
            - Why not IPO?
                - Desire to maintain decision-making control
                - Avoid ownership dilution
                - Bad market conditions
                - Disclosing info to competitors
                - SEC reporting requirements
                - Already have enough capital
                - Costs/fees of IPO
                - SOX (officer liability)
        - "Dual-Track Versus Single-Track Sell-Outs: An Empirical Analysis of Competing Harvest Strategies," J. Brau, Nile Hatch and Ninon Sutton, *Journal of Business Venturing*, Vol. 25, 2010, 389-402.
            - Dual track strategy cuts discount, in multivariate, don't need to go public same premium
        - "The Desire to Acquire and IPO Long-Run Underperformance," J. Brau, Rob Couch and Ninon Sutton, *Journal of Financial and Quantitative Analysis*, Vol. 47, Issue 3, 2012, 493-510.
            - Acquirers -15.6% 3-year versus 5.9% non-acquirers

        - Two SCOR papers and Three SB-2 papers
            - SCOR – no liquidity
            - SBs delist about twice S-1s.
            - SB less time to go public but costs relatively more
        - *Oxford Handbook of Entrepreneurial Finance*, Ed. Douglas Cumming, J. Brau, "Why Do Firms Go Public?" 2012, Chapter 15, 467- 494.
            - Can provide support for any number of reasons firms go public – not uniform.
    - Where Have All the IPOs Gone? Gao, Ritter, and Zhu, *Journal of Financial and Quantitative Analysis*, 2013.
        - Propose economies of scope hypothesis of selling out to larger firm to speed product to market.
    - Where Have All the IPOs Gone? The Hard Life of the Small IPO, Rose and Solomon, *Harvard Business Law Review*, 2016.
        - "The decline appears instead to be more attributable to the historical unsuitability of small firms for the public market."
    - The US Listing Gap, Doidge, Karolyi, Stulz, *Journal of Financial Economics*, 2017.
        - High delist rate via acquisition accounts for 46% and low IPO rate 54%.
- Are there negative effects on investors, companies or capital markets as a result of any decrease in the number of IPOs or delays by companies in going public?
    - For example, are investors losing out on growth opportunities?
        - Well-documented poor performance of IPOs, particularly small ones and non-VC backed ones beginning with Ritter (1991).
        - *Harvard Business Law Review* paper consistent
        - Lose out on Skewness /Lottery– Mitton and Vorkink paper
    - Are companies getting the capital they need?
        - Super cheap debt, private equity, and strategic buyouts seem to be providing sufficient capital.
    - Is the impact limited to small cap companies?
        - Need to check stylized facts.
    - What is the impact on capital markets and efficient allocation of capital?
        - Assuming regulation is not the main issue (as per academic studies) then this seems to be an example of market pressures.
- If there has been a sustained decrease in the number of U.S. IPOs, has it disproportionately impacted one portion of the stock market vs. the others? For example, **small cap companies** vs. large cap companies. If yes:
    - What are the major causes of this disproportionate impact?
        - *Harvard Business Law Review* (Rose and Solomon, 2016) paper:
            - "We therefore theorize that the decline in small IPOs appears to be more likely attributable to both demand- and supply-side transformations. In this scenario, small IPOs were being fed to market by forces that, because of regulatory and market changes (including the rise of online brokerages), are now in decline. Brokers were taking rents and creating an artificial supply of smaller companies that then languished in the market. Now that these supply-side forces are gone, the false supply is also gone. Coupled with a lack of demand predominantly due to the high failure rates and lack of growth for these firms, the market for small IPOs has reached equilibrium at a much lower level."
        - Poor market performance.
        - Anecdotal – perception – regulation more onerous for small firms.
    - Is the reduced number of U.S. IPOs mostly caused by a slowdown in the creation of new, small cap private companies?
        - My prior is most likely not.
    - What, if any, are the major negative consequences of the disproportionate impact?
        - I'm not sure there are any for investors – performance on average sub par, seeking skewness probably not best strategy.
    - What, if anything, should be changed going forward to ameliorate this impact?
        - I'm not convinced anything should be changed. Would require more direct study on optimal number (and size) of public firms.
    - Looking ahead, do you expect this trend to continue unless some material changes are made?
        - Market forces should push the equilibrium to the closest thing to optimality. I expect capital to be allocated efficiently within current regulational context.
- What recommendations would you propose in terms of policy, market structure, or other considerations?
    - I feel more specific research is needed before any policy decisions should be made. The questions above are a great start of the type of questions that need to be researched.

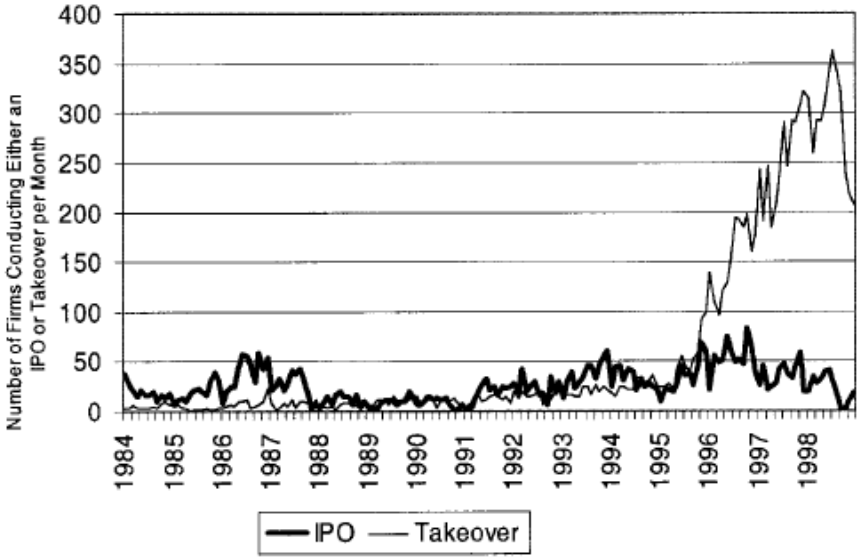
A Chronology of Research by Jim Brau Pertaining to Factors that Impact the Number of IPOs

The rest of this document summarizes my own research on this topic over nearly 20 years of work.

The idea that the M&A market is an alternative to IPO for harvest

"The Choice of IPO Versus Takeover: Empirical Evidence," J. Brau, Bill Francis and Ninon Kohers (Sutton), *Journal of Business*, Vol. 76, No. 4, 2003, pp. 583-612.

Takeaway: The popularity of selling out surpassed IPO as exit strategy around 1996



Takeaway: In most cases IPOs earn a richer premium

TABLE 5 Various Premiums Associated with Takeovers and IPOs

	IPO		Takeover		Difference Tests	
	Mean	Median	Mean	Median	Parametric *p*-Value	Nonparametric *p*-Value
Complete sample	13.3	7.1	10.9	4.7	.0018	<.0001
High-tech sample	13.7	7.9	13.0	7.6	.7455	.2178
Non-high-tech sample	13.2	6.6	10.7	4.5	.0025	<.0001
Stock only merger sample	13.3	7.1	13.0	4.6	.8597	.0060
Cash only merger sample	13.3	7.1	9.5	4.2	.0044	<.0001
Stock only high-tech sample	13.7	7.9	18.9	12.0	.1651	.1170
Stock only non-high-tech sample	13.2	6.6	11.8	3.4	.3606	.0008
Cash only high-tech sample	13.7	7.9	4.6	3.2	<.0001	.0019
Cash only non-high-tech sample	13.2	6.6	9.9	4.4	.0216	<.0001

NOTE.—The mean and median values are for the ratio of offer price per share to book value of equity per share for each respective sample. *P*-values for tests of differences in the mean and median values for the two samples are provided, parametric *t*-tests first with nonparametric Wilcoxon rank tests second. The complete sample consists of 4,683 IPOs and 4,927 takeovers.

Takeaway: Liquidity risk is driving premium (at least in part).

$$\underset{(<0.0001)}{\text{Offer/book value} = 13.87} \; \underset{(<0.0001)}{- 0.04\ \text{LIQUIDITY}} \; \underset{(<0.6124)}{- 0.45\ \text{TAKEOVER}}, \qquad (2)$$

The idea to ask CFOs why they choose to (or not to) do an IPO among other questions.

"Initial Public Offerings: An Analysis of Theory and Practice," J. Brau and Stan Fawcett, *Journal of Finance*, Vol. 61 (February), 2006, pp. 399-436.

Takeaway: The need for capital is not near the top.

Table II

Survey Responses to the Question: How Important Were/Are the Following Motivations for Conducting an IPO?

Means are based on a five-point scale with anchors of 1 = not important to 5 = very important. Size is based on revenues, with large firms over $100,000,000. Firms with founding dates before 1987 are considered old. High-Tech represents high-technology firms. An Underwriter Prestige ranking of high represents firms with underwriters who are rated over 8.1 in Jay Ritter's underwriter database. Venture Capital is an indicator variable that equals 1 when a VC backs the IPO firm and 0 otherwise. Ownership Decrease is assigned large if the insiders' (managers') ownership percentage decreases by more than the sample median (23%). ***, **, and * indicates statistical significance at the 1%, 5%, and 10% levels, respectively. Superscripts indicate significant simultaneous differences using Tukey inference tests. Means with the same superscript are significantly different from means with different superscripts. Means without superscripts are not significantly different from the other two means. The sample consists of 336 completed surveys composed of 37 withdrawn IPOs, 87 successful IPOs, and 212 firms that were large enough, but did not attempt to go public during the period 2000 to 2002.

	Overall		IPO Status			Size		Age		High-Tech		Underwriter Prestige		Venture Capital		Ownership Decrease	
	Mean	% 4–5	Withdrawn	Successful	Not Tried	Small	Large	Young	Old	No	Yes	Low	High	No	Yes	Small	Large
To create public shares for use in future acquisitions	3.56	59.41	4.00[a]	3.48	3.37[b]	3.72	3.38*	3.76	3.29**	3.48	3.77	3.37	3.75	3.47	3.79	3.49	3.44
To establish a market price/value for our firm	3.39	51.17	3.54[a]	3.57[a]	2.93[b]	3.47	3.25	3.48	3.05**	3.28	3.63*	3.47	3.57	3.45	3.61	3.80	3.25**
To enhance the reputation of our company	3.27	49.11	3.62[a]	3.44[a]	2.67[b]	3.56	2.85***	3.38	2.85**	3.03	3.75***	3.38	3.53	3.21	3.69**	3.89	3.31**
To minimize our cost of capital	3.12	42.51	3.30	3.02	3.15	3.12	3.17	3.16	3.20	3.28	2.85*	3.52	3.01*	3.21	3.09	2.82	3.20
To broaden the base of ownership	3.11	45.89	3.16	3.28	2.76	3.19	2.93	3.15	3.07	3.06	3.14	2.97	3.28	2.98	3.36	3.31	3.14
To allow one or more principals to diversify personal holdings	2.99	44.11	2.62[a]	2.91	3.43[b]	2.84	3.18	2.97	3.12	3.01	2.89	2.83	2.81	2.84	2.80	3.06	2.83
To attract analysts' attention	2.71	29.76	2.97[a]	2.89[a]	2.15[b]	2.98	2.32***	2.86	2.24***	2.51	3.09***	2.79	2.94	2.66	3.07*	3.09	2.69
To allow venture capitalists (VCs) to cash out	2.54	32.15	2.92	2.56	2.17	2.60	2.43	2.82	1.93***	2.44	2.65	1.93	2.89***	1.91	3.14***	2.97	2.24**
Our company has run out of private equity	2.50	27.55	2.41	2.61	2.37	2.76	2.18***	2.71	2.34	2.57	2.38	3.14	2.40**	2.38	2.71	2.53	2.91
Debt is becoming too expensive	2.11	14.29	1.86	2.08	2.35	1.96	2.35**	2.02	2.20	2.25	1.87**	2.52	1.86**	2.40	1.77***	1.74	2.29**

Takeaway: Overall and industry conditions most important.

Table III

Survey Responses to the Question: To What Extent Did/Do the Following Influence the Timing of a Possible IPO?

Means are based on a five-point scale with anchors of 1 = not important to 5 = very important. Size is based on revenues with large firms over $100,000,000. An Underwriter Prestige ranking of high represents firms with underwriters who are rated over 8.1 in Jay Ritter's underwriter database. Venture Capital is an indicator variable that equals 1 when a VC backs the IPO firm and 0 otherwise. Ownership Decrease is assigned large if the insiders' (managers') ownership percentage decreases by more than the sample median (23%). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Superscripts indicate significant simultaneous differences using Tukey inference tests. Means with the same superscript are significantly different from means with different superscripts. Means without superscripts are not significantly different from the other two means. The sample consists of 336 completed surveys composed of 37 withdrawn IPOs, 87 successful IPOs, and 212 firms that were large enough, but did not attempt to go public during the period 2000 to 2002.

	Overall		IPO Status			Size		Underwriter Prestige		Venture Capital		Ownership Decrease	
	Mean	%4–5	Withdrawn	Successful	Not Tried	Small	Large	Low	High	No	Yes	Small	Large
Overall stock market conditions	4.21	82.94	4.51	4.06	4.26	4.23	4.21	3.93	4.30	3.90	4.43***	4.51	3.78***
Industry conditions	3.87	69.82	4.14[a]	3.59[b]	4.17[a]	3.81	3.99	3.48	3.87	3.56	3.91	3.94	3.43*
We will need the capital to continue to grow	3.82	66.47	3.97	3.80	3.72	4.04	3.51***	4.37	3.71**	3.57	4.09**	3.71	4.08
Other good firms are currently going public	2.53	24.26	2.92	2.44	2.37	2.76	2.21***	2.14	2.74**	2.08	2.94***	3.00	2.09***
First-day stock performance of recent IPOs	2.17	13.02	2.49	1.98	2.28	2.16	2.18	1.76	2.26**	1.79	2.37***	2.43	1.74**

Takeaway: SEC reporting requirements only middle of pack and SOX near bottom.

Table VIII

Survey Responses to the Question: How Important Were/Are the Following in Your Decision to Withdraw/Not to Conduct the IPO?

Means are based on a five-point scale with anchors of 1 = not important to 5 = very important. Size is based on revenues with large firms over $100,000,000. Firms with founding dates before 1987 are considered old. High-Tech represents high-technology firms. An Underwriter Prestige ranking of high represents firms with underwriters who are rated over 8.1 in Jay Ritter's underwriter database. Venture Capital is an indicator variable that equals 1 when a VC backs the IPO firm and 0 otherwise. IPO Demand is considered high if the final offer price is above or equal to the original mid-filing price and low otherwise. Initial return is the percentage return from the offer price to the first-day market closing price. Firms with an initial return over 10% are considered hot. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Superscripts indicate significant simultaneous differences using Tukey inference tests. Means with the same superscript are significantly different from means with different superscripts. Means without superscripts are not significantly different from the other two means. The sample consists of 336 completed surveys composed of 37 withdrawn IPOs, 87 successful IPOs, and 212 firms that were large enough, but did not attempt to go public during the period 2000 to 2002.

	Overall		IPO Status			Size		Age		Hi-Tech		Underwriter Prestige		Venture Capital		IPO Demand		Initial Return	
	Mean	% 4–5	Withdrawn	Successful	Not Tried	Small	Large	Young	Old	No	Yes	Low	High	No	Yes	Low	High	Cold	Hot
Desire to maintain decision-making control	3.48	55.56	1.72[a]	3.02[b]	4.00[c]	3.24	3.73***	3.06	4.07***	3.61	2.94***	3.24	2.44***	3.04	2.35***	3.02	2.98	3.24	2.73*
To avoid ownership dilution	3.19	47.02	1.51[a]	2.59[b]	3.75[c]	3.06	3.33	2.88	3.72***	3.29	2.72***	2.71	2.13**	2.38	2.19	2.60	2.54	2.61	2.47
Bad market/industry conditions	3.13	48.24	4.76[a]	3.17[b]	2.80[b]	3.21	3.02	3.43	2.74***	3.02	3.55**	3.77	3.56	3.24	3.87**	3.56	2.71**	3.46	2.87*
Disclosing information to competitors	2.78	32.81	1.67[a]	3.06[b]	2.86[b]	2.67	2.88	2.70	2.79	2.73	2.94	2.83	2.58	2.80	2.54	3.02	3.07	3.00	3.11
SEC reporting requirements	2.71	31.56	1.56[a]	2.70[b]	2.92[b]	2.49	2.93***	2.63	2.83	2.76	2.47	2.59	2.33	2.80	2.10***	3.02	2.41**	3.14	2.47***
Already have enough capital	2.65	29.87	1.95[a]	2.22	2.97[b]	2.44	2.88***	2.40	3.04***	2.75	2.29**	2.27	2.08	2.10	2.14	2.19	2.25	2.24	2.16
Costs/fees of an IPO	2.64	27.12	1.67[a]	2.86[b]	2.73[b]	2.69	2.59	2.60	2.68	2.65	2.60	3.10	2.33***	2.96	2.20***	3.09	2.63*	3.24	2.51***
Officer liability (The Sarbanes–Oxley Act)	2.31	19.3	1.75[a]	2.46[b]	2.35[b]	2.19	2.42	2.28	2.34	2.27	2.42	2.50	2.13	2.27	2.18	2.29	2.56	2.31	2.49
Low price of our stock	2.24	19.48	3.36[a]	2.51	1.90[b]	2.29	2.17	2.56	1.83***	2.11	2.78***	2.79	2.72	2.71	2.75	2.86	2.12***	2.89	2.16***
We would prefer to be acquired by another firm	1.96	15.04	1.72	1.70[a]	2.12[b]	2.07	1.88	2.07	1.94	2.00	1.83	2.04	1.62*	1.74	1.71	1.76	1.64	1.69	1.67
To avoid EPS dilution	1.90	9.42	1.53[a]	2.36[b]	1.76[a]	1.92	1.89	1.93	1.78	1.86	2.07	2.28	2.06	2.27	2.00	2.47	2.22	2.51	2.22

The idea that a strategy can be used to help mitigate the discount to selling out vis-à-vis an IPO.

"Dual-Track Versus Single-Track Sell-Outs: An Empirical Analysis of Competing Harvest Strategies," J. Brau, Nile Hatch and Ninon Sutton, *Journal of Business Venturing*, Vol. 25, 2010, 389-402.

Takeaway: Using a dual-track strategy can help ameliorate the straight sell discount.

Table 4
Comparing premiums of single-track sell-outs with dual-track characteristics to dual-track sell-outs.

		Single-Track	Dual Private	Dual Public
Premium median=		2.6[a]	5.1[b]	7.7[b]
mean=		16.9[a]	42.6[b]	44.5[b]
n=		62	44	96
Cash Offer Premium	median =	1.6[a] (*n*=1 8)	3.7[b] (*n*=8)	3.7[b] (*n*=15)
Mixed OfferPremium	median =	3.3 (*n*=15)	3.5 (*n*=18)	2.9 (*n*=15)
Stock Offer Premium	median =	4.2[a] (*n*=29)	9.6[b] (*n*=18)	15.0[b] (*n*=66)

Superscripts denote statistical significance in differences at the 5% level using a Tukey simultaneous difference test (for means) and a Dunn simultaneous difference test (for medians). If two subsamples have the same superscript, they are not significantly different from each other, but they are significantly different from the third subsample that has a different superscript. For example, for the cash offer premium, both dual private and dual public premiums (superscript b's) are significantly greater than the premium for single-track sell-outs (superscript a).

Takeaway: In multivariate setting, a dual private strategy works as well as a dual public strategy

Table 6
Cross-sectional regression explaining the sell-out premium, 1995–2004.

	Model 1:		Model 2:	
Variable	Estimated coefficient	*p*-value	Estimated coefficient	*p*-value
Intercept	−3.4	0.5519	−12.1	0.4112
Dual private target (DPRIV)	**22.4**	**0.0042**	**24.1**	**0.0316**
Dual public target (DPUB)	**20.6**	**0.0012**	**17.5**	**0.0678**
Industry focus (FOCUS)	7.0	0.0652	3.6	0.6267
Common stock payment (STOCK)	8.0	0.1136	4.4	0.6527
Mixed payment (MIX)	−2.6	0.5740	−11.3	0.2639
High technology firm (TECH)	−5.2	0.3325	−8.8	0.4119
Bubble years (BUBBLE)	11.3	0.0490	14.3	0.2124
Tech bubble (TECH_BUBBLE)	27.3	0.0009	43.6	0.0049
Ln assets (ASSETS)	−0.3	0.8393	2.5	0.4136
Venture capital backing (VC)	23.2	<.0001	26.1	0.0023
Investment banker rank (IB_Rank)			−0.1	0.9553
Adjusted R^2	0.21	<.0001	0.20	<.0001
Number of observations	678		311	

The idea is if a lot of firms do an IPO to buy other firms, how does this impact their long run stock performance?

"The Desire to Acquire and IPO Long-Run Underperformance," J. Brau, Rob Couch and Ninon Sutton, *Journal of Financial and Quantitative Analysis*, Vol. 47, Issue 3, 2012, 493-510.

We analyze 3,547 initial public offerings (IPOs) from 1985 through 2003 to determine the impact of acquisition activity on long-run stock performance. The results show that IPOs that acquire within a year of going public significantly underperform for 1- through 5-year holding periods following the 1st year, whereas nonacquiring IPOs do not significantly underperform over these time frames. For example, the mean 3-year style-adjusted abnormal return is −15.6% for acquirers and 5.9% for nonacquirers. Our cross-sectional and calendar-time results suggest that the acquisition activity of newly public firms plays an important and previously unrecognized role in the long-run underperformance of IPOs.

This is just one of a ton of studies that show that IPOs in general, or specific types of IPOs such as small firms, tend to underperform risk-adjusted benchmarks.

The idea to test small firm IPO initiatives:

Takeaway: Various factors help a SCOR offering succeed in raising desired capital. Lack of liquidity probably most limiting aspect of the SCOR.

Small Corporate Offering Registration

"The Determinants of Successful Micro-IPOs: An Analysis of Issues Made Under the Small Corporate Offering Registration (SCOR) Procedure," J. Brau and Jerry Osteryoung, *Journal of Small Business Management*, Vol. 39, No. 3, 2001, pp. 209-227.

"Micro-IPOs: An Analysis of the Small Corporate Offering Registration (SCOR) Procedure with National Data," J. Brau and Gardner Gee, *Journal of Entrepreneurial Finance*, Vol. 14, Issue 3, 2010, 69-89.

SB-2 Initiative

"SB IPOs and IPO Anomalies: An Empirical Analysis of the Small Firm Uniqueness Hypothesis," J. Brau and Troy Carpenter, *Journal of Entrepreneurial Finance*, Vol. 16, Issue 2, 2013, 75-96.

"Efficacy of the 1992 Small Business Incentive Act," J. Brau and Troy Carpenter, *Journal of Financial Economic Policy*, Vol. 4, Issue 3, 2012, 204-217 (lead article).

"Small-Firm Uniqueness and Signaling Theory," J. Brau and Troy Carpenter, *Journal of Business Economics and Finance*, Vol. 1, Issue 1, 2012, 50-63.

Takeaway: SB-2 takes less time to go public but costs relatively more. (Not in tables.)
Takeaway: SB-2's delist about double as much as S-1s.

Table VII. Frequency Reason for Delisting

Panel A. SB-2 IPOs

Status	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Active	259	48.9	259	48.9
Merge	77	14.5	336	63.4
Liquidate	0	0.0	336	63.4
Delist	194	36.6	530	100

Panel B. S-1 IPOs (Pooled)

Status	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Active	663	52.6	663	52.6
Merge	388	30.8	1051	83.4
Liquidate	4	0.3	1055	83.7
Delist	205	16.3	1260	100

Panel C. S-1 IPOs (Pair-Matched)

Status	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Active	286	55.2	286	55.2
Merge	141	27.2	427	82.4
Liquidate	0	0.0	427	82.4
Delist	91	17.6	518	100

Caveat: Due to lack of data we did not study SB-1 program.

The idea is to explore why do firms go public?

Oxford Handbook of Entrepreneurial Finance, Ed. Douglas Cumming, J. Brau, "Why Do Firms Go Public?" 2012, Chapter 15, 467-494.

"Six months after he founded Netscape, Clark agitated for the company to go public. The company had few revenues, no profits, and a lot of new employees. No one else inside the company thought it should do anything but keep its head down and try to become a viable enterprise. "Jim was pressing for us to go public way before anyone else," recalls Marc Andreessen. It turned out there was a reason for this. He'd seen a boat called *Juliet*. He wanted one just like it, only bigger. To get it, he needed more money.

By then the decision was not Clark's alone to make. The company had hired a big-name CEO, Jim Barksdale, and had a proper board of directors. Barksdale didn't want to go public. He thought the company had enough problems trying to figure out how to turn a profit without having to explain itself to irate shareholders. But this time Clark had power, through his equity stake. He called a meeting to discuss the initial public offering (IPO), and stacked it with lawyers and bankers who stood to reap big fees from a public share offering and who were, as a result, enthusiastic about his initiative. At that meeting Barksdale finally capitulated. Eighteen months after Netscape was created, and before it had made a dime, Netscape sold shares in itself to the public. On the first day of trading the price of those shares rose from $12 apiece to $48. Three months later it was at $140. It was one of the most successful share offerings in the history of the US stock markets, and possibly the most famous.

There was only one explanation for its success: the market now saw the future through Clark's eyes. "People started drinking my Kool-Aid," says Clark … What the IPO did was give anarchy credibility."

Lewis (2001)

From Chapter Above: Summary of theories

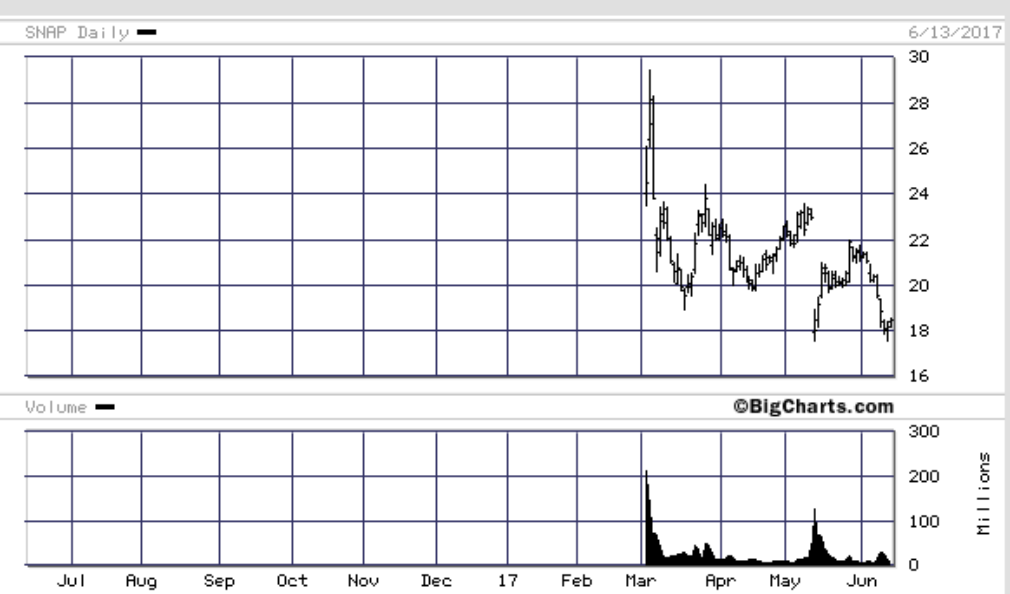
Having briefly discussed the leading theories on why firms go public, I now summarize here by listing each theory and the primary empirical predictions:

- Minimize cost of capital/Optimal capital structure: *IPO firms will experience a decrease in their WACC after an IPO.*
- To overcome borrowing constraints or increase bargaining power with banks: *IPO firms will experience lower interest rates or less credit concentration after the IPO.*
- Asymmetric Information/Pecking order of financing: *IPO firms will offer public equity only after exhausting retained earnings and debt capacity.*
- To establish a market price for subsequent sell-out: *Frequent acquisitions of IPO firms will be observed in the after-market shortly after an IPO (e.g., 1-3 years).*
- As a tool to cash-out: *IPO firms, especially those with VCs, will frequently include secondary shares in the IPO.*
- To allow more dispersion of ownership: *IPO firms will experience an increase in the ownership base after the IPO.*
- Publicity/First-Mover Advantage: *IPO firms will experience a significant increase in press coverage or other publicity during and after the IPO process.*
- To create public market so the firm has the currency of shares for acquisitions: *Many IPO firms will participate in the M&A market shortly after going public, especially as acquirers (to separate from the two-stage sell-out hypothesis).*
- To create an analyst following: *IPO firms will experience a favorable analyst following, on average.*
- Windows of Opportunity: *IPOs that issue during opportunistic windows will underperform after the IPO (e.g., 1, 3, 5 years).*
- Create shares for compensation: *IPO firms will offer more stock-based compensation schemes after the IPO.*
- Because other firms in the same industry have gone/Are going public: *IPO firms will herd, particularly in industries.*
- In Netscape's case, to buy a boat: *Jim Clark will be able to buy his yacht after the IPO.*

Since my study of finance began in grad school in 1994, I have always been intrigued with how much academic theory actually jives with what practitioners do on a daily basis. As such, financial surveys have always been of personal interest. While I was a doctoral student working on my dissertation, the idea of an IPO survey constantly nagged me. Graham and Harvey (2001) proved to me that it could be done, and Brau and Fawcett (2006a) was the result. Brau and Fawcett (2006a) has helped us to understand the motives of a sample of CFOs for conducting an IPO (among other questions), but it has not uncovered a definitive single answer for why firms go public. The contrast of the economic models of M&M and the reality of the opening quote about the Netscape IPO demonstrate corner solutions to the question of why firms go public. At least ten other theories fit in between these two endpoints.

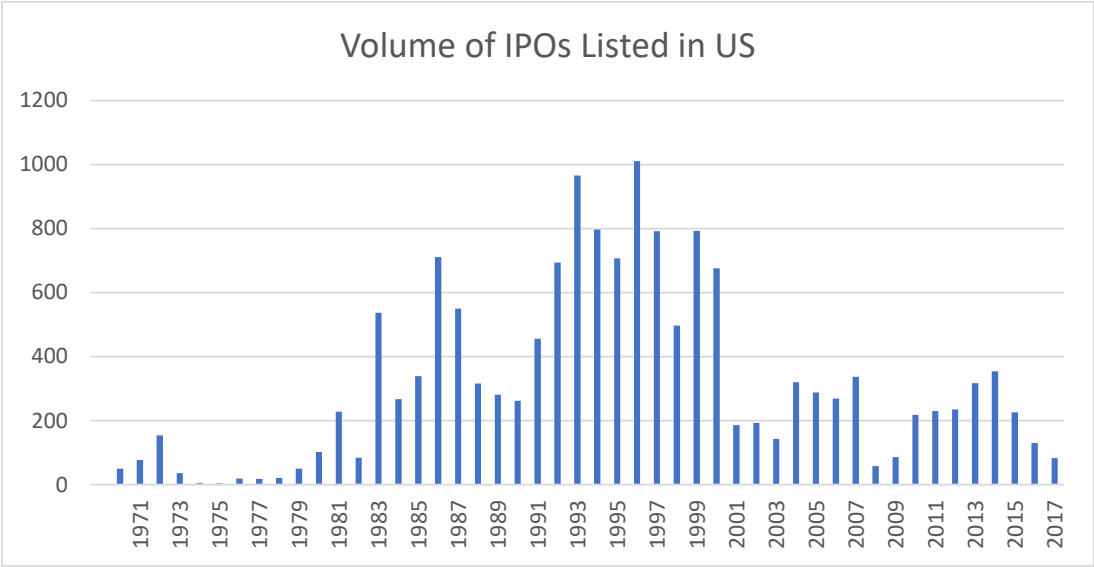
Like traditional empirical studies, the survey evidence suggests that motives for going public vary far and wide, depending on the entrepreneur and firm. In this chapter I have summarized and organized the extant theories on why firms go public. Depending on the sample, method, intent, and perhaps desire of the researcher, all of the theories have been supported through argument and empirics at least once. Several theories are supported by one study and disputed by another. Within my own research, in fact, within one of my single papers, this has been the case. The researcher (and investor) is left to ask not which theory is correct, but which theories apply to which samples of firms that go public.

Anecdotal Example if needed of at least a short term underperformance (Source Bigcharts). Chart downloaded by Jim Brau.



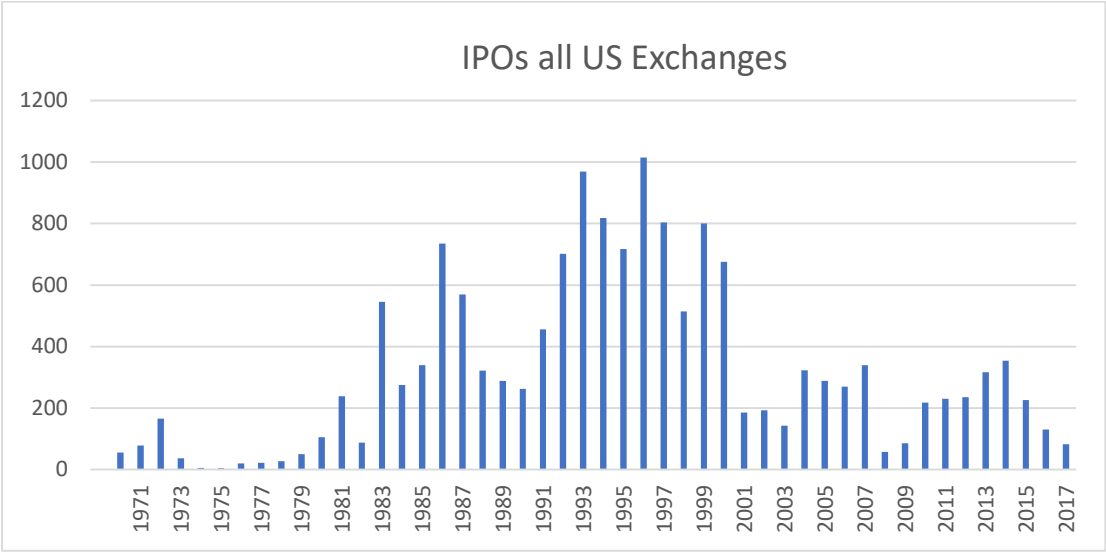
Company Data	
Company Name:	Snap Inc.
Dow Jones Industry:	Software
Exchange:	NYSE
Shares Outstanding:	682,136,000
Market Cap:	21.46B
Short Interest:	65,535,068 (9.61%)
52-Week EPS:	-2.6673
52-Week High:	29.44 on Friday, March 03, 2017
52-Week Low:	17.56 on Monday, June 12, 2017
P/E Ratio:	n/a
Yield:	n/a
Average Price:	20.9328 (50-day) 21.2915 (200-day)
Average Volume:	19,699,924 (50-day) 28,283,327 (200-day)

Charts created by Jim Brau using SDC Data for context. Frequency of IPOs Issued in US:



Through June 13, 2017. Total IPOs 15,173. Source: SDC New Issues Database.

Only screen is exchange listed. Exchanges included: American, Nasdaq, New York, New York OTC, NYSE Alter, NYSE Amex, NYSE MKT LLC, OTC, Sm Cap Mkt. Exchanges not included: Amer Emerg, Boston, California, Cincinnati, Detroit, EmgMktAmex, Honolulu, Midwest, Pacific, Phila, Pink Sheet, PORTAL, Spokane.



Through June 13, 2017. Total IPOs 15,384. Includes all US exchanges on SDC New Issues Database.